

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of recording data to a computer readable storage medium comprising:

identifying time-series information as a read/write unit serving as a unit, in which data is written onto said storage medium and read out from said storage medium, including a plurality of decoding/reproduction units;

carrying out data compression on the time-series information including, generating management information in respective decoding/reproduction units of said time-series information and generating additional information for one or more decoding/reproduction units of said time-series information, said management information for use in a decoding/reproduction process for decoding and reproducing said time-series information, said additional information including a predetermined condition when said time-series information is retrieved; and

recording said time-series information once compressed, said management information, and said additional information onto the computer readable storage recording medium wherein said additional information and said management information is recorded as decoding/reproduction units within a read/write unit of said storage medium, [[and]] wherein

~~said management information~~ said additional information ~~being~~ is recorded logically just after said management information ~~next to each other in respective predetermined decoding/reproduction units.~~

Claim 2 (Currently Amended): The recording method according to claim 1, wherein, data of a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium, includes a plurality of said decoding/reproduction units of said time-series information; and the sequence of pieces of data included in said decoding/reproduction units pertaining to said read/write unit in a time-series direction is changed.

Claim 3 (Currently Amended): The recording method according to claim 1, wherein said management information added to data of said decoding/reproduction unit as management information for said decoding/reproduction process is time management information on a reproduction/output timing of said data.

Claim 4 (Currently Amended): The recording method according to claim 2, whereby additional information for data of said predetermined-interval decoding/reproduction unit is recorded by placing management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units at a predetermined location in data of said read/write unit.

Claim 5 (Currently Amended): The recording method according to claim 2, wherein, data of said read/write unit comprises a plurality of packets; and additional information for data of said predetermined-interval decoding/reproduction unit is recorded in data of said read/write unit as a packet including management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units.

Claim 6 (Currently Amended): The recording method according to claim 2, wherein,  
data of said read/write unit comprises a plurality of packets;  
a specific packet is selected among said packets of said time-series information  
completing said data compression; and  
additional information for data of said predetermined-interval decoding/reproduction  
unit is recorded at a location determined as a location relative to said specific packet  
including management information for a decoding/reproduction process for a corresponding  
one of said decoding/reproduction units.

Claim 7 (Currently Amended): The recording method according to claim 1, wherein  
said additional information includes at least information on a time at which data of said  
decoding/reproduction unit of said time-series information is acquired.

Claim 8 (Currently Amended): A recording method according to claim 1, wherein  
said additional information includes information on a condition in which data of said  
decoding/reproduction unit of said time-series information is acquired.

Claim 9 (Currently Amended): The recording method according to claim 1, wherein,  
said time-series information is video information;  
data of said decoding/reproduction unit is information of a field unit or a frame unit;  
and  
said data compression uses a correlation with data of said decoding/reproduction unit.

Claim 10 (Currently Amended): A recording apparatus having a recording medium  
comprising:

a data input device for receiving time-series information as a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium, including a plurality of decoding/reproduction units;

a data compression device for carrying out data compression on the time-series information;

a management-information generation device for generating management information in respective decoding/reproduction units of said time-series information for use in a decoding/reproduction process for decoding and reproducing said time-series information;

an additional-information generation device for generating additional information for one or more decoding/reproduction units of said time-series information that includes a predetermined condition when said time-series information is retrieved; and

a recording control device for recording said time-series information once compressed on ~~[[a]]~~ said recording medium wherein said additional information and said management information is recorded as decoding/reproduction units within a read/write unit of said recording medium, and recording said management information generated by said management-information generation device and said additional information by said additional-information generation device ~~next to each other~~ on said recording medium, wherein

said additional information is recorded logically just after said management information ~~in each of predetermined decoding/reproduction units.~~

Claim 11 (Currently Amended): The recording apparatus according to claim 10, wherein,

said recording control device generates data including a plurality of said decoding/reproduction units of said time-series information as data of a read/write unit

serving as a unit, in which data is written onto said recording medium and read out from said recording medium; and

the sequence of pieces of data included in said decoding/reproduction units pertaining to said read/write unit in a time-series direction is changed.

Claim 12 (Currently Amended): The recording apparatus according to claim 10, wherein said management information added to data of said decoding/reproduction unit as management information for said decoding/reproduction process is time management information on a reproduction/output timing of said data.

Claim 13 (Currently Amended): The recording apparatus according to claim 11, wherein said recording control device records additional information for data of said predetermined-interval decoding/reproduction unit by placing management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units at a predetermined location in data of said read/write unit.

Claim 14 (Currently Amended): The recording apparatus according to claim 11, wherein,

data of said read/write unit comprises a plurality of packets; and

said recording control device records additional information for data of said predetermined-interval decoding/reproduction unit in data of said read/write unit as a packet including management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units.

Claim 15 (Currently Amended): The recording apparatus according to claim 11,  
wherein,

data of said read/write unit comprises a plurality of packets;

a specific packet is selected among said packets of said time-series information  
completing said data compression; and

said recording control device records additional information for data of said  
predetermined-interval decoding/reproduction unit at a location determined as a location  
relative to said specific packet including management information for a  
decoding/reproduction process for a corresponding one of said decoding/reproduction units.

Claim 16 (Currently Amended): The recording apparatus according to claim 10,  
wherein said additional information includes at least information on a time at which data of  
said decoding/reproduction unit of said time-series information is acquired.

Claim 17 (Canceled).

Claim 18 (Currently Amended): The recording apparatus according to claim 10,  
wherein,

said time-series information is video information;

data of said decoding/reproduction unit is information of a field unit or a frame unit;

and

said data compression uses a correlation with data of said decoding/reproduction unit.

Claims 19-29 (Canceled).

Claim 30 (Currently Amended): A reproduction apparatus for a recording medium having recorded thereon, compressed time-series information as a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium, including a plurality of decoding/reproduction units, management information for a decoding/reproduction process to data included in each of said decoding/reproduction units of said time-series information, and additional information for one or more decoding/reproduction units of said time-series information that includes a predetermined condition when said time series information is retrieved, wherein said additional information and said management information is recorded as decoding/reproduction units within a read/write unit of said recording medium, ~~said management information~~ and said additional information ~~[[being]]~~ is recorded logically just after said management information next to one another, said apparatus comprising:

a read device for reading out said compressed time-series information and said additional information from said recording medium;

a separation device for separating said compressed time-series information and said additional information, which have been read out by said read device;

a decompression device for decompressing said compressed time-series information separated by said separation device;

a first reproduction/output device for reproducing and outputting said decompressed time-series information by using management information for said decoding/reproduction process; and

a second reproduction/output device for reproducing and outputting said additional information output by said separation device synchronously with an operation to reproduce and output data of said decoding/reproduction unit of said time-series information by using management information for said decoding/reproduction process.

Claim 31 (Currently Amended): A reproduction apparatus for a recording medium having recorded thereon, compressed time-series information as a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium, including a plurality of decoding/reproduction units, management information for a decoding/reproduction process to data included in each of said decoding/reproduction units of said time-series information, and additional information for one or more decoding/reproduction units of said time-series information that includes a predetermined condition when said time series information is retrieved, wherein said additional information and said management information is recorded as decoding/reproduction units within a read/write unit of said recording medium, ~~said management information~~ and said additional information [[being]] is recorded logically just after said management information ~~next to one another~~, said apparatus comprising:

a read device for reading out said compressed time-series information and said additional information from said recording medium;

a separation device for separating said compressed time-series information and said additional information, which have been read out by said read device;

a decompression device for decompressing said compressed time-series information separated by said separation device;

a reproduction/output device for reproducing and outputting said decompressed time-series information by using management information for said decoding/reproduction process; and

a reproduction/control device for reproducing said additional information output by said separation device in synchronization with an operation to reproduce and output data of said decoding/reproduction unit of said time-series information by using management



information for said decoding/reproduction process, and controlling data of a corresponding one of said decoding/reproduction units on the basis of said generated additional information.

Claim 32 (Currently Amended): An image pickup apparatus comprising:

an image pickup device;

a data compression device for carrying out a data compression process on image data output by said image pickup device;

a time-series information identifying device for identifying time-series information as a read/write unit serving as a unit, in which data is written onto a recording medium and read out from said recording medium, including a plurality of decoding/reproduction units;

a time-management information generation device for generating time-management information in respective decoding/reproduction units of said time-series information and additional information for one or more decoding/reproduction units of said time-series information, said time-management information for use in a decoding/reproduction process for said image data, said additional information including a predetermined condition when said image data is retrieved; and

a recording control device for recording said image data once compressed on a recording medium wherein said additional information and said management information is recorded as decoding/reproduction units within a read/write unit of said recording medium, and recording ~~said management information generated by said management information generation device and~~ said additional information generated by said additional-information generation device ~~next to each other~~ on said recording medium logically just after said management information in each of predetermined decoding/reproduction units.

Claim 33 (Currently Amended): The image pickup apparatus according to claim 32,  
wherein,

said recording control device generates data including a plurality of said  
decoding/reproduction units of said image data as data of a read/write unit serving as a unit,  
in which data is written onto said recording medium and read out from said recording  
medium; and

the sequence of pieces of data included in said decoding/reproduction units pertaining  
to said read/write unit in a time-series direction is changed.

Claim 34 (Currently Amended): The image pickup apparatus according to claim 32,  
wherein said recording control device records additional information for data of said  
predetermined-interval decoding/reproduction unit by placing management information for a  
decoding/reproduction process for data of a corresponding one of said decoding/reproduction  
units at a predetermined location in data of said read/write unit.

Claim 35 (Currently Amended): The image pickup apparatus according to claim 32,  
wherein,

data of said read/write unit comprises a plurality of packets; and

said recording control device records additional information for data of said  
predetermined-interval decoding/reproduction unit in data of said read/write unit as a packet  
including management information for a decoding/reproduction process for data of a  
corresponding one of said decoding/reproduction units.

Claim 36 (Currently Amended): The image pickup apparatus according to claim 32,  
wherein,

data of said read/write unit comprises a plurality of packets;  
a specific packet is selected among said packets of said compressed time-series information; and  
said recording control device records additional information for data of said predetermined-interval decoding/reproduction unit at a location determined as a location relative to said specific packet including management information for a decoding/reproduction process for a corresponding one of said decoding/reproduction units.

Claim 37 (Currently Amended): The image pickup apparatus according to claim 32, wherein said additional information includes at least information on a time at which data of said decoding/reproduction unit of said image data is acquired.

Claim 38 (Canceled).

Claim 39 (Currently Amended): The image pickup apparatus according to claim 32, wherein,

data of said decoding/reproduction unit is information of a field unit or a frame unit;  
and

said data compression process uses a correlation with data of said decoding/reproduction unit.

Claim 40 (Previously Presented): The recording method according to claim 1, wherein a data size of each additional information is constant.

Claim 41 (Canceled).

Claim 42 (Previously Presented): The recording method according to claim 1, wherein said additional information includes time information of said time-series information.

Claim 43 (Previously Presented): The recording method according to claim 1, wherein said additional information includes condition information of said time-series information.

Claim 44 (Previously Presented): The recording apparatus according to claim 10, wherein a data size of each additional information is constant.

Claim 45 (Canceled).

Claim 46 (Previously Presented): The recording apparatus according to claim 10, wherein said additional information includes time information of said time-series information.

Claim 47 (Previously Presented): The recording apparatus according to claim 10, wherein said additional information includes condition information of said time-series information being generated.

Claim 48 (Previously Presented): The image pickup apparatus according to claim 32, wherein a data size of each additional information is constant.

Claim 49 (Canceled).

Claim 50 (Previously Presented): The image pickup apparatus according to claim 32, wherein said additional information includes time information of said image data being generated by said image pickup device.

Claim 51 (Previously Presented): The image pickup apparatus according to claim 32, wherein said additional information includes condition information of said image data being generated by said image pickup device.